

ABSTRACT OF THE DISCLOSURE

A method of producing parts from powdered metal comprising the steps of providing a metallurgic powder comprising iron, 0-0.6 weight percent carbon, 0.5-5.0 weight percent silicon, 0.5-6.0 weight percent nickel, 0.5-1.5 weight percent molybdenum, 0-0.7 weight percent manganese, and 12-20 weight percent chromium, the weight percentages calculated based on the total weight of the powder. Secondly, the powders are compressed at a pressure of 35 to 65 tsi to provide a green compact. Then, the compact is heated in an atmosphere to a temperature of 2100°F to 2400°F for 20 to 90 minutes, such that the resulting microstructure of the compact is either single phase ferritic or dual phase ferritic and austenitic.